BOMBAY NATURAL HISTORY SOCIETY'S MAMMAL SURVEY OF INDIA, BURMA AND CEYLON.

Report No. 37, Nepal.

By Martin A. C. Hinton and T. B. Fry.

Collection ...	...	No. 37.
Locality ...	...	Nepal.
Date ...	...	August 1920 to March 1921.
Collected by	...	Lt.-Colonel R. L. Kennion with the assistance of the Society's Collector, N. A. Baptista.

The researches of Brian H. Hodgson in Nepal, made between 1823 and 1843, laid the foundations of Himalayan mammalogy. Owing to the imperfect and confused labelling of Hodgson's specimens a modern collection from the neighbourhood of Katmandu has been a desideratum for many years. While the work of the Mammal Survey in the adjoining countries of Kumaon and Sikkim cleared up much that was obscure, it did not supply the necessary topotypical material by means of which alone a sound judgment could be formed as to the status of the many nominal species described by Hodgson as being peculiar to Nepal. In these circumstances the present collection forms one of the most useful and interesting contributions to Indian mammalogy yet made by the Mammal Survey. In drawing up this report we have seized the opportunity to examine the Hodgson M.S. and drawings, both those belonging to the British Museum and those in the library of the Zoological Society, and to collate them with Hodgson's specimens in the national collection. This work has been done pretty thoroughly for all orders, with the exception of the Ungulates, which must be reserved for a future occasion. As a result we are able to give below a complete list of the mammals of Nepal so far as they are now known; and also a list of those species erroneously, though commonly, reputed to have been found in Nepal.

From this report it will be seen that there are still many gaps in our knowledge; and that many species, especially among Chiroptera, Insectivora and Rodentia, represented in the Survey collections from Kumaon and Sikkim are still unknown from Nepal, although they probably have representatives in the latter country. It is to be hoped that the Survey Collector will obtain these, together with material representing the species still known to us only by Hodgson's specimens.

The Committee of the Society have asked us to record here their grateful thanks to General H. H. Sir Chandra Shumshere Jung

Bahadur Rana, G. C. B., G. C. S. I., G. C. V O., D. C. L., the Prime Minister of Nepal, for the help and assistance he has provided our collector.

The special thanks of the Society are also due to Lt.-Col. R .L. Kennion, late Envoy at Katmandu, for the first part of the present collection, which was made by him personally; for superintending the work of Baptista, who made the second part of the collection; and for so kindly supplying us with much valuable topographical information.

The Zoological Society of London must also be thanked for lending us the priceless Hodgson M.S. and drawings from its library. Without that loan it would have been quite impossible to have made full use of this collection.

In preparing the following notes upon the physical configuration of Nepal we have made free use of the account given in the "Imperial Gazetteer". The State consists of a long narrow rectangular strip of country, with an area of about 54,000 square miles, trending from the north-west to the south-east, its S. E. extremity being in latitude 26° N. longitude 88° E., and its N. W. corner in latitude 30° N. longitude 80° E. As a Himalayan State it is a country carved in high relief, of diversified surface, and variable climate. Broadly speaking it is traversed from W. to E. by three parallel longitudinal valleys, separated or bounded by three ranges of hills, the altitudes of the valley floors and the heights of the hills increasing as we go northwards towards the Tibetan frontier which passes more or less along the crest of the Himalayas proper.

Dealing with these leading physical features in order, we note first that the southern border of Nepal is formed by a lowland belt, the *Tarai*, from 10 to 30 miles wide, the altitude of which varies between 200′ and 300′ above sea-level. The Tarai is formed in part by open country under cultivation and in part by primeval jungles, the latter consisting for the most part of dense forests of Sal intermixed with Sissum, Semal (cotton trees), and near the hills, Char (*Pinus longifolia*). In places it is quite impenetrable, owing to the luxuriant undergrowth and the tangle of giant creepers swinging from tree to tree. The forest is occasionally interrupted by grass which often reaches a height of 10 or 15 feet. In the low-lying portions, particularly in the eastern Tarai, there are swampy tracts clothed with elephant grass, which in some places is so dense that not even elephants can force their way through. Quicksands and bogs, often of a most dangerous character, are of frequent occurrence.

Along the northern margin of the Tarai, at all events westward of the Kosi River, a low range of sandstone hills—the Siwaliks—rises to a height of about 2,000′ and extends almost continuously

westward through Nepal except where breached by transverse rivers. Behind to the north of this range are longitudinal valleys (each containing a lateral stream tributary to one of the transverse rivers of the country), which separate the Siwaliks from the median range of hills next to be noted. These longitudinal valleys are called "*Dhuns*" and their floors lie at levels of from 500′ to 1,000′. Into them open the narrow ravines which furrow the southern face of the median range. Both the Siwaliks and the Dhuns are clothed with dense jungle.

To the north of the Siwaliks and Dhuns rises the median or Mahabharat Range, which attains heights of 7,000′ to 8,000′, passing continuously through the country from east to west, except where pierced by the chief transverse rivers. Of these there are three, *viz.*, the Kosi, Ganduk and Kawnala, named in order from east to west. Lateral branches of these have excavated great longitudinal valleys which separate the Mahabharat Range from the main or northern chain of the Himalayas. Lofty ridges leaving the main chain of the Himalayas at right angles, connect the main chain with the Mahabharat Range and form the water partings between the basins of the three rivers above named. Similar ridges bounding the great gorges which furrow the southern slopes of the Himalayas proper jut into the longitudinal valleys from the north at intervals between these divides but, of course, do not effect a junction with the Mahabharat Range.

The divide between the Kosi and Ganduk basins is of especial interest. It is formed by a great ridge leaving the main chain of the Himalayas at Gosainthan. Passing southward it bifurcates some miles to the north of the line of the Mahabharat Range, and encloses in the bifurcation the great valley of Katmandu.

The floor of this valley, lying at an altitude of about 4,700′ is an undulating plain of ovate form measuring about 20 miles from north to south and about 12 miles from east to west. It is completely surrounded by hills of moderate elevation (7,000′ to 9,000′) except to the south at Ferping, where a narrow and deep gorge carries the small river Baghmati, draining the valley of Katmandu, out towards the plain of the Ganges. According to an ancient tradition the valley of Katmandu was once a large and deep lake; and this seems to be possible in view of its geological structure.

According to the Gazetteer all the valleys of central Nepal (that is between the Mahabharat Range and the Himalayas proper) are well watered, highly cultivated, and often densely populated. The climate varies naturally with the altitude and rainfall. In the Katmandu Valley it is very good, much like that of southern Europe, but moister. The average rainfall at Katmandu is about 56·5 inches per annum, half of which falls in the months July and

August, while the greater part of the remainder falls in June and September. The average temperature recorded for each of the four months January, May, July and November is respectively 51°·9, 71°·6, 77°, and 60°·2.

Zoologically speaking the Tarai, Siwaliks, Dhuns and the lower slopes of the Mahabharat Range are strictly oriental, at all events as regards the mammal fauna; and the mammals of this part of the country are for the most part identical with those inhabiting Bengal. Among the larger mammals, elephants, rhinoceros, sambhur and tiger are characteristic. With these, in the Tarai, occur buffalo, chital, hog-deer and swamp-deer. In the dhuns, bison replace buffalo and the characteristic swamp animals of the Tarai are, of course, absent.

At higher levels on the Mahabharat Range, in the valley of Katmandu, and on the still higher slopes to the north of that valley the character of the fauna gradually changes, the Oriental forms disappearing and being replaced by Palearctic types. Many of the species which occur in this transition region are, if not peculiar to Nepal, at least peculiar to that country and the corresponding zones of Kumaon and Sikkim. Among the characteristic large animals of the higher valleys may be mentioned burrhel, thar and true bears.

The following is a list of the stations at which mammals were collected by Lt.-Col. Kennion or Baptista. We are greatly indebted to the former for supplying us with information as to the whereabouts and altitudes of these localities.

A.—Localities in the Tarai (altitudes of each about 300′).

1. Bankulwa Morang. In Tarai E. of Kosi River.
2. Hindulwa Morang. „ „ „ „ „ „
3. Bairaglia. In Tarai on Baghmati River on Nepal-Indian frontier.
4. Baria Patherghatta. In Tarai to the North of Bairaglia.
5. Hazaria Patherghatta. „ „ „ „ „ „
6. Tribinia. On Ganduk River on Nepalese-Indian frontier (possibly a Dhun locality; but altitude 300′).

B.—Localities in the Dhuns.

7. Hetwada about 30 miles S.S,W. of Katmandu in the valley of the Rapti; altitude about 1,000′.
8. Partapur. Lower down the Rapti Valley between Hetwada and Tribinia; altitude about 700′.
9. Sunachir. „ „ „ „ „ „ „

C.—Localities in or immediately around the Valley of Katmandu.

10. Katmandu .. .. Altitude 4,500′.
11. Changoo ... ... „ „
12. Hathiban .. .. „ 5,000′.
13. Ferping .. .. „ „
14. Chalna-Khel .. .. „ 5,000′?

15. Thankot .. .. Altitude 5,000′.
16. Bouzini .. Probably near 14 and 15.
17. Godaveri.. .. .. „ 5,000′. 12 miles S. of Katmandu.
18. Kakani .. .. „ 7,000′.
19. Nagarkot.. .. .. „ „
20. Sipari .. .. „ 6,000-8,000′.

D.—Localities in basin of Ganduk.

21. Nawakot. Altitude 3,000′ in valley, 20 miles N. W. of Katmandu.
22. Laharipava „ 11,000′ } "These places are I think situated
23. Ramchie „ „ } in valleys N. of Katmandu in main
24. Thunsi „ „ } range, about 40 to 50 miles from Kat-
25. Parchung „ } mandu; the elevations given probably
26. Pattibhagan „ 8,000′ } about right.—*R.L.K.*

In the following pages the material collected for the Mammal Survey is listed in the way customary in these Reports—the enumeration of the specimens following immediately upon the statement as to synonymy. The word "Hodgson" appearing after the enumeration indicates either that specimens are also in the Hodgson collection, or that Hodgson has left satisfactory evidence that the species was known to him as inhabiting Nepal.

(1) Macaca mulatta, Zimm.

The Rhesus.

(For synonymy see Hinton and Wroughton, J.B.N.H.S., xxvii. p. 668.)
Nagarkot, 7,000′, ♀ 2; Hazaria Patherghatta, 300′, ♂ 1.
"Hodgson."

(*See* also Reports Nos. 7, 14-16, 19, 23, 25-27, 35-37.)

The facts which necessitate the substitution of Zimmermann's *mulatta* for Audebert's *rhesus* as the technical name of this species have been discussed in the paper by Hinton and Wroughton cited above.

This is the "*Macacus* (*Pithex*) *oinops*" of Hodgson, who gives its distribution in Nepal as the Tarai and Saul Forest together with the lower and central hilly regions.

"Found all over Morang and Patherghatta. This monkey congregates in large troops in heavy forest. Twice a day, morning and evening, they come near the river to drink water, and they are very shy. The call is "*Pio*" repeated frequently and recognised as a warning signal.—*N.A.B.*

(2) Macaca assamensis, McCl.

The Assam Macaqua.

(For synonymy, see Hinton and Wroughton, J.B.N.H.S., xxvii., p. 669.)
"Hodgson."

(*See* also Reports Nos. 20, 23, 26.)

This is the "*Macacus* (*Pithex*) *pelops*" of Hodgson who states it to be restricted in Nepal to the "northern hilly region." Although no specimens are included in the survey collection now before us, good material was obtained by the Mammal Survey in Sikkim. (*See* Report No. 23, and Hinton and Wroughton *loc. cit. supra.*)

(3) PITHECUS SCHISTACEUS, Hodgs.

The Himalayan Langur.

(Synonymy in No. 15.)

Hazaria, 300′, ♀2.

" Hodgson."

(*See* also Report No. 15.)

In describing the distribution of this species Blanford (p. 30), says : " As stated under the last species (*i.e., entellus*), it remains to be seen whether the Langurs of the Tarai and lower Himalayan slopes are not *P. entellus*. I can find no record, by a competent naturalist, of *P. schistaceus* below 5,000′ or 6,000′." Hodgson in his Catalogue (J. A. S. B., x., 907) states its chief habitat in Nepal to be the Tarai and Lower Hills and says that it occurs more rarely in the Central and even in the Northern Hilly regions. The specimens obtained by Baptista at Hazaria are most characteristic examples of *schistaceus* and fully confirm Hodgson's statement that the species occurs in the Tarai. In Kumaon too, specimens were obtained by the Mammal Survey at the low elevation of 1,100′ ; and from that station (Ramnagar) it was observed up to heights of about 9,000′. (Report No. 15).

The distribution of this species would therefore seem to afford an interesting parallel to that of *Macaca assamensis* which, although a characteristic Himalayan species, has also an out-post in the Sunderbuns (Anderson, P. Z. S., 18 72, p. 529 ; Hinton and Wroughton, J. B. N. H. S., xxvii., p. 667).

" Vernacular names :—*Langur* (Mallaha) ; *Derdoa* (Pahari). This Langur is fairly plentiful in Hazaria near the bank of the Soonsori River. They are not very shy. The call is "*Hoop* ! *Hoop* !" generally uttered as a warning call by one of the troop."—*N.A.B.*

(4) ROUSETTUS LESCHENAULTI, Desm.

Leschenault's Fruit Bat.

(Synonymy in No. 11.)

" Hodgson".

(*See* also Reports Nos. 11, 15, 16, 17, 22, 27, 28.)

This is Hodgson's "*Pteropus pyrivorus*". He obtained it in the great valley of Nepal at 4,000′ where, according to the manuscripts in the library of the Zool. Soc., it occurs " rarely in autumn."

(5) PTEROPUS GIGANTEUS LEUCOCEPHALUS, Hodgs.

Hodgson's Flying Fox.

1835. *Pteropus leucocephalus,* Hodgson, J. A. S. B., iv., p. 700.

1912. *Pteropus giganteus leococephalus,* Andersen, Cat. Chir., B. M., i., p. 333 (*q. v.* for full synonymy).

" Hodgson".

Hodgson's original specimen was obtained on January 31, in the valley of Nepal near Katmandu. In his M. S. he describes it as " sleeping in a tree, a passenger never seen here before". Another of his notes states this form to be " very rare in hills, very common in plains or Tarai".

This subspecies is now known to occur in Kooloo, Nepal, Assam, Cachar, Manipur and is recorded with doubt from Arrakan and Pegu. No specimens have yet been obtained by the Mammal Survey.

(6) Cynopterus brachyotis angulatus, Mill.

The Malay Short-nosed Fruit Bat.

(Synonymy in No. 17.)

"Scully".

Scully (J. A. S. B., lvi., p. 239, 1887) described two specimens which he collected in Nepal, one being from the Nowakot district, the other from just within the valley of Nepal. These he referred to "*C. marginatus*" pointing out that the measurements "accord best with those of *C. brachyotis* from S. Andaman Island". Andersen (*Cat. Chir.* p. 611) includes Scully's "*marginatus*" doubtfully in the synonymy of *C. brachyotis angulatus*, Miller, a form otherwise not known to occur nearer to Nepal than in Assam (North Lakhimpur.)

(7) Rhinolophus perniger, Hodgs.

The Himalayan Horseshoe Bat.

(Synonymy in No. 14.)

Chalna-Khel, ♀ 1; Bouzini, ♂ 1.

"Hodgson".

(*See* also Reports Nos. 17, 23 and 25.)

Hodgson's type was obtained from "the Forest of Hatiban" in the great valley of Nepal.

(8) Rhinolophus pearsoni, Horsf.

Pearson's Horseshoe Bat.

(Synonymy in No. 15.)

Parchung, ♂ 1.

(*See* also Reports Nos. 15, 26.)

(9) Rhinolophus macrotis, Hodgs.

The Large-eared Horseshoe Bat.

1844. *Rhinolophus macrotis*, Hodgson, in Blyth, J. A. S. B., xiii., p. 485. "Hodgson". "Central valley of Nepal".

This species described from the Central valley of Nepal and known also from Mussoorie, has not yet been obtained by the Mammal Survey. Closely related to *R. pearsoni*, according to Andersen, it is distinguished by its smaller size, larger ears and relatively longer third metacarpals.

(10) Rhinolophus ferrum-equinum tragatus, Hodgs.

Hodgson's Horseshoe Bat.

(Synonymy in No. 23.)

"Hodgson".

This well marked subspecies was described from the Central valley of Nepal, where Hodgson found it to be "permanently present in outhouses" at an altitude of 4,000′. It also occurs in Sikkim, where specimens were obtained both by Hodgson and by the Mammal Survey.

(11) Rhinolophus affinis himalayanus, K. And.

The Allied Horseshoe Bat.

1905. *Rhinolophus affinis himalayanus*, K. Andersen, P.Z.S., 1905, p. 103.

Parchung, ♂ 1; Thankot, ♂ 1, ♀ 1.

"Hodgson."

(12) Rhinolophus subbadius, Blyth.

1844. *Rhinolophus subbadius,* Blyth, J. A. S. B., xiii., p. 486.
1891. *Rhinolophus minor,* Blanford (in part ; *nec.* Horsfield), Mamm. No. 154.
"Hodgson."

(13) Hipposideros armiger, Hodgs.

The Great Himalayan Leaf-nosed Bat.

(Synonymy in No. 14.)

Pattibhagan, ♂ 1 ; Bouzini, ♂ 14.
"Hodgson."
"Scully." Ind. Mus. Collector, 1871.

(*See* also Reports Nos. 15, 16, 20, 25, 26, 28.)

Hodgson obtained this bat in the Central valley of Nepal at an altitude of 4,500′.

"Very common in Nepal at all seasons" (Scully).

(14) Hipposideros fulvus, Gray.

The Bicoloured Leaf-nosed Bat.

(Synonymy in No. 3.)

? Hodgson M. S. (Zool. Soc.) vol. 1, p. 8, fig. 3.
"Scully."

There is evidence (although no specimens are now known) that Hodgson obtained a second and smaller species of *Hipposideros* in Nepal. Andersen (P.Z.S., 1905, p. 139) pointing out that Hodgson's "*Vespertilio subbadia*" J. A. S. B., x., p. 908, 1841) is a *nomen nudum* and not identical with Blyth's *Rhinolophus subbadius,* as Blyth supposed, adds:—"the head of this Bat is figured in Hodgson's unpublished drawings, pl. 8, fig. 3; it is not a *Rhinolophus,* but a *Hipposideros,* probably *H. bicolor* or an allied form." Hodgson obtained his specimen from the Central valley of Nepal at an altitude of 4,000′.

Scully (J. A.S. B., lvi, p. 248) refers three specimens which he captured in the valley of Nepal to this species.

(15) Hipposideros cineraceus, Blyth.

The Little Leaf-nosed Bat.

1853. *Hipposideros cineraceus,* Blyth, J. A. S. B., xxii., p. 410 ; K. Andersen, A.M.N.H. (9) ii, p. 384 (1918).
1871. *Phyllorhina amboinensis,* Peters, M. B. Akad. Berlin, 1871, p. 323.
1872. *Phyllorhina micropus,* Hutton, P.Z.S., 1872, p. 703.
1891. *Hipposiderus amboinensis,* Blanford Mammalia, No. 167.
"Scully."

Two specimens were obtained in the Nepal valley by Scully who referred them to *Phyllorhina amboinensis.* The fore-arm measurements 1″·4 and 1″·37 ; (35·3—34·8 m.m.) recorded by Scully agree with those of the present species.

(16) Lyroderma lyra, Geoff.

The Indian Vampire Bat.

(Synonymy in No. 1.)

Hazaria, 300′, ♂ 1, ♀ 2.

(*See* also Reports Nos. 4-9, 12, 14, 15, 19, 22, 23, 27.)

This bat has not been hitherto definitely known to occur in Nepal, where it is not improbably restricted to the Tarai and the lower slopes

bordering upon it. Hodgson (as has already been pointed out by Andersen and Wroughton, A. M. N. H. (7), xix., p. 135, did not become acquainted with the species until after his removal to Sikkim; and the specimens in his collection, though at one time erroneously labelled as being from Nepal, came in fact from the latter country. In his M.S. Hodgson gives the habitat as "Tarai of Sikkim."

"I saw of these bats only eight in a hole in a tree. I could only catch three. The inhabitants of this place (Hazaria) told me that these bats are very common in the beginning of May."—*N. A. B.*

(17) NYCTALUS LABIATUS, Hodgs.

The Indian Noctule Bat.

(Synonymy in No. 25.)

"Hodgson". "Scully".

(*See* also Reports Nos. 26, 28.)

Obtained from the valley of Nepal at 4,000′ (Hodgson M.S.). "Not common in the Nepal valley. Mr. Hodgson says that it is found there throughout the year, does not hibernate, and quests for food solitarily" (Scully). Scully and Hodgson each seem to have obtained single specimens.

(18) PIPISTRELLUS BABU, Thos.

The Babu Pipistrel.

(Synonymy in No. 26.)

Kakani, ♂ 1.
"Hodgson" ?

(19) PIPISTRELLUS COROMANDRA, Gray.

The Coromandel Pipistrel.

(Synonymy in No. 5.)

Hazaria, 300′, ♀ 2; Bairia, 300′, ♂ 4, ♀ 4; Bairaglia, 300′, ♂ 1, ♀ 1.
"Hodgson". "Scully". (Ind. Mus.)

(*See* also Reports Nos. 2, 9, 11, 13-15, 19, 23, 26-29.)

"Mr. Hodgson presented five examples of *Vesperugo abramus*, obtained in Nepal, to the British Museum; but he does not appear to have discriminated the species, as he gave no name to it." (Scully, J. A. S. B., lvi., p. 251.)

Scully states this to be "a very common species in the Nepal valley where it is to be found at all seasons".

(20) PIPISTRELLUS MIMUS, Wrought.

The Southern Dwarf Pipistrel.

(Synonymy in No. 1.)

(*See* also Reports Nos. 2, 3, 5-13, 15, 18-20, 23, 25, 27.)
Bairia, 300′, ♂ 11, ♀ 7; Hazaria, 300′, ♀ 1.

(21) MYOTIS FORMOSUS, Hodgs.

Hodgson's Bat.

1835. *Vespertilio formosus*, Hodgson, J. A. S. B., iv., p. 700; Blanford Mammalia No. 210.

"Hodgson".
"Valley of Nepal, 4,000′" (Hodgson M.S.)

Apparently rare in the valley of Nepal; Hodgson obtained only one example there and Scully failed to find it.

(22) Myotis muricola, Gray.

The Wall Bat.

(Synonymy in No. 17.)

"Hodgson".

(*See* also Reports Nos. 23 and 27).

"Valley of Nepal, 4,000′". (Hodgson M.S.)

(23) Myotis siligorensis, Tomes.

The Darjiling Bat.

1855. *Vespertilio siligorensis*, Tomes, in Horsfield, A. M. N. H., 2, xvi, p. 102.

1891. *Vespertilio mystacinus*, (in part) Blanford, Mammalia, No. 211.

"Scully".

(*See* also Report No. 15, under *darjelingensis*.)

"This is one of the commonest bats in the Nepal valley. It may be seen every evening throughout the year, flying rather high in the air." Scully, J. A. S. B., lvi., p. 254.

(24) Myotis nipalensis, Dobson.

The Nepal Bat.

1844. *Vespertilio pallidiventris*, Hodgson, Calc. J.N.H., iv., p. 286, Gray, 1846, 1863 (*nomen nudum*).

1871. *Vespertilio nipalensis*, Dobson, Proc. As. S. B., 1871, p. 214, Mon. As. Chir, p. 141, (1876); Cal. Chir., B.M., p. 302, (1878); Scully; Blanford Mammalia No. 207.

"Hodgson".

Indian Mus. Collector, 1871. (Type 172*a* Calcutta).

Although this small bat has been treated (in the absence of material) as a synonym of *caliginosus* or of *siligorensis* it seems to be a perfectly distinct species characterized by having its lower surface pure white. Forearm according to Dobson 34·5 m.m. Both Hodgson's original specimen and that obtained by the Indian Museum Collector in 1871 came from the valley of Nepal. It is to be hoped that further material of this bat will be procured. Quite possibly it is really a species of *Leuconoe* and not a *Myotis* at all.

(25) Murina huttoni, Peters.

The White-bellied Tube-nosed Bat.

(Synonymy in No. 15.)

"Scully"

A single specimen was obtained by Scully in the Nepal Valley in September (J.A.S.B., lvi., p. 251).

(26) Miniopterus fuliginosus, Hodgs.

Hodgson's Long-winged Bat.

(Synonymy in No. 15.)

"Hodgson." "Scully."

(*See* also Reports Nos. 13, 16 and 22.)

"Valley of Nepal, 4,000′." (Hodgson M.S.)

Hodgson says that this species remains in Nepal throughout the year and does not hibernate, and that it is solitary in habit when hunting for its prey.

Scully obtained a single specimen in the Nepal Valley.

(27) HEMIECHINUS COLLARIS, Gray and Hardw.

Hardwicke's Hedgehog

(Synonymy in No. 3.)

"Hodgson."

Hodgson (1841) records three species of "*Erinaceus*," *viz.*:—"*spatangus*," "*collaris*" and "*grayii*," as inhabiting the central region of Nepal; "*spatangus*" and "*grayii*" are, of course, synonyms of *collaris*.

There is no material in the Hodgson collection and as far as we are aware this is the only reference which exists concerning the occurrence of a hedgehog in Nepal.

(28) TALPA MICRURA, Hodgs.

The Short-tailed Mole.

(Synonymy in No. 23.)
"Hodgson."

(*See* also Report No. 23.)

Hodgson sent specimens of this mole home in November 1841. He gives its habitat as the Central and Northern hilly regions of Nepal.

(29) SORICULUS NIGRESCENS CENTRALIS, Hint.

The Sikkim Brown-toothed Shrew.

1922. *Soriculus nigrescens centralis*, Hinton, J. B. N. H. S., Vol. xxviii., p. 1054· Bouzini, ♂ 3, ♀ 1.

Owing to the natural tendency to ascribe Hodgson's specimens to "Nepal" and to the insufficiency of the original labels, Blanford was led to give both Nepal and Sikkim as the habitat of this species. But as shown in the paper just cited, all the specimens collected before the work of the Mammal Survey came either from Sikkim or from Bhutan, and the species was consequently quite unknown to occur in Nepal. Now that it has been discovered in the latter country it is not surprising to find that its representative there is a distinct subspecies differing from the typical form by its darker colour, larger size, and peculiar bodily proportions.

(30) PACHYURA, sp.

The Musk Shrew.

Nagarkot, 8,000', ♂ 2, ♀ 1; Godaveri, 7,000', ♀ 1; Sunachir, ♀ 1; Bouzini, ♂ 1; Bairia, 300', ♂ 3, ♀ 3; Hazaria, 300, ♂ 3, ♀ 4.

"Hodgson".

We hope to take up the revision of the Indian White-toothed Shrews in earnest shortly and therefore refrain from offering any remarks upon these most difficult animals on the present occasion.

(31) CROCIDURA RUBRICOSA, And.

Anderson's Assam Shrew.

(Synonymy in No. 25.)

Katmandu, 8,000' (unsexed).

(*See* also Reports Nos. 25, 36.)

(32) Felis tigris, Linn.

The Tiger.

1766. *Felis tigris*, Linnaeus, Syst. Nat. i., p. 61. (Omitted by mistake in Report No. 11).

"Hodgson".
H. M. the King.

(33) Felis pardus, Linn.

The Panther.

(Synonymy in No. 5.)

"Hodgson".

Both the Tiger and the Panther are, according to Hodgson, generally distributed over Nepal.

(34) Felis viverrina, Benn.

The Fishing Cat.

(Synonymy in No. 18.)

Bankalwa Morang, ♂ 1.
"Hodgson".

In his M.S. Hodgson speaks of this as the "common Wild Cat of the Tarai".

(35) Felis bengalensis, Kerr.

The Leopard Cat.

(Synonymy in No. 11.)

"Hodgson".

(*See* also Reports Nos. 14-17, 20, 23, 25, 31.)

For this species Hodgson used at different dates the specific names "*nepalensis*" and "*pardochrous*". According to his M.S. it inhabits the woods of the central region of Nepal.

(36) Felis nebulosa, Griffith.

The Clouded Leopard.

1821. *Felis nebulosa*, Griffith, Carnivora, p. 37; Blanford, Mamm. No. 32.
1825. *Felis macroscelis*, Temminck, Horsf. Zool. Journ., i., p. 543. Hodgson, 1841.
1844. *Felis macrosceloides*, Hodgson, Calc., J. N. H., iv., p. 286. "Hodgson".

Inhabits the Central Region of Nepal. (Hodgson).

(37) Felis temmincki, Vigors, and Horsf.

(Synonymy in No. 14.)

"Hodgson".

(*See* also Report No. 16.)

This is the species called "*F. murmensis*" or "*moormensis*" by Hodgson who states it to inhabit the Central Region of Nepal.

(38) Felis affinis, Gray.

The Jungle Cat.

(Synonymy in No. 1.)

Hathiban, ♀ 2 ; Bouzini, ♂ 1 ; Hazaria, 300′, ♀ 1.
Bankalwa Morang, ♂ 1 ; Hindalwa Morang, ♂ 1.
" Hodgson".

(*See* also Reports Nos. 3-7, 10-12, 15, 16, 18-20, 22, 24, 27, 28.)

This is Hodgson's *Lynchus erythrotis* " apparently identical with *F. chaus*, Auct". Generally distributed throughout Nepal. (*Hodgson*).

(39) Felis torquata, F. Cuv.

The Waved Cat.

1826. *Felis torquata*, F. Cuvier, Hist. Nat. Mamm. pl. 126.
1837. *Felis inconspicua*, Gray, Charlesworth's Mag. N. H., i., p. 577.
? *Felis huttoni*, Blyth, J. A. S. B., xv., p. 109.

The type locality of this species is stated to be Nepal, where according to F. Cuvier it was obtained by Alfred Duvaucel. Hodgson makes no reference to the species.

(40) Viverra zibetha, Linn.

The Large Indian Civet.

(Synonymy in No. 14.)

Chalna-Khel, ♀ 1 ; Hindalwa Morang, ♂ 1 ; Bankalwa, ♀ 2.
" Hodgson".

(*See* also Reports Nos. 17, 20, 23, 25-28.)

Generally distributed over Nepal, according to Hodgson, who thought there were two species, which he named " *melanurus*" and "*civettoides*" without publishing descriptions.

" Vernacular name:—*Nit Biralloo* (Pahari). In Patherghatta and Morang this seems to be most common and is very destructive to poultry". —*N.A.B.*

(41) Viverricula malaccensis, Gmel.

The Small Indian Civet

(Synonymy in No. 3.)

" Hodgson".

(*See* also Reports Nos. 5, 7, 10-13, 15-20, 22, 24, 27, 28.)

This animal is restricted in Nepal to the Tarai, according to Hodgson, who thought there were two species. The range as known to him extended along the Tarai from the Sutlej to the Tista.

(42) Prionodon pardicolor, Hodgs.

The Indian Tiger Cat.

(Synonymy in No. 23.)

" Hodgson".

(*See* also Report No. 25.)

This species, according to Hodgson, inhabits the Central and Northern hilly regions of Nepal. He sent specimens home first in November 1841.

(43) Paradoxurus crossi, Gray.

The Northern Manoori.

1832. *Paradoxurus crossi*, Gray, P. Z. S., p. 66; Wroughton, J. B. N. H. S., xxv., p. 50.
1836. *Paradoxurus hirsutus*, Hodgson, As. Res. xix., p. 72.
1864. *Paradoxurus nigripes*, Gray, P. Z. S., p. 635.
1889. *Paradoxurus hermaphroditus*, (in part) Blanford, Mamm. 52.
"Hodgson".
In Nepal, restricted to the Tarai (*Hodgson*).

(44) Paguma grayi, Benn.

The Himalayan Palm Civet.

(Synonymy in No. 15.)

Thankot, ♂ 2.
"Hodgson". "Scully" (Ind. Mus.).

Inhabits the Central Region of Nepal. (*Hodgson*),

(45) Herpestes auropunctatus, Hodgs.

The Small Indian Mongoose.

(Synonymy in No. 27.)

Hathiban, ♂ 2, ♀ 1.
"Hodgson" Indian Mus. Collector 1872. "Scully" (Ind. Mus.).
Inhabits the Central Region of Nepal.

(46) Herpestes nepalensis, Gray.

The Nepal Mongoose.

(Synonymy in No. 19.)

Godaveri, 7,000′ ♂ 2, ♀ 1, unsexed 1.

(*See* also Report No. 27.)

These specimens appear to be indistinguishable from *H. nepalensis*, differing from *auropunctatus* in the much finer ticking and darker general colour of the coat. It is of interest to get positive evidence of the presence of this species in Nepal in view of the doubts as to its occurrence there held by Wroughton (J. B. N. H. S., xxv., p. 68).

(47) Herpestes edwardsi, Geoff.

The Common Indian Mongoose.

(Synonymy in No. 1, under *Mungos mungo*.)

"Hodgson".

This is "*Herpestes* vel *Mangusta nyula*" of Hodgson who states that in Nepal it is restricted to the Tarai.

(48) Herpestes urva, Hodgs.

The Crab-eating Mongoose.

(Synonymy in No. 23.)

"Hodgson".

Inhabits the Lower and Central hilly regions of Nepal (Hodgson.)

(49) CANIS INDICUS, Hodgs.

The Jackal.

(Synonymy in No. 1 under *C. aureus*.)

Nagarkot, 8,000′ ♀ 1; Katmandu 8,000′, unsexed 1.
Hathiban, ♂ 1; Bankalwa Morang, ♂ 2, ♀ 1.
"Hodgson". "Scully" (Ind. Mus.).

(*See* also Reports Nos. 14-16, 19, 20, 22, 25, 27, 28.)

Hodgson states that the Jackal is generally distributed over Nepal: but in a M.S. note he adds that it is "rare in Hills, common in the great populous valley of Nepal proper, seldom seen elsewhere in Hills".

"The Jackal is not common in Pathergatta."—*N. A. B.*

(50) CUON DUKHUNENSIS, Sykes.

The Indian Wild Dog.

(Synonymy in No. 2.)

Sipari, ♂ 1, juv.
"Hodgson".

(*See* also Reports Nos. 4, 7, 11, 15.)

Distributed over the Lower, Central and Northern hilly regions of Nepal (*Hodgson*).

"Vernacular name:—*Bhonso* (Pahari); *Farppa* (Bhotia). Very rare in Nepal".—*N.A.B.*

(51) VULPES BENGALENSIS, Shaw.

The Indian Fox.

(Synonymy in No. 1.)

Hindalwa, ♀ 2.
"Hodgson". "Scully" (Ind. Mus.).

(*See* also Reports Nos. 3, 5, 7, 10, 15, 19, 24.)

According to Hodgson this Fox in Nepal is confined to the Tarai whence he sent specimens home in November 1841.

Two specimens collected by Scully in the valley of Nepal are however listed in the Cat. Ind. Mus. (ii., p. 272), a male from Katmandu and a female from Ranijangal.

"Vernacular names:—*Laddia* (Mallaha); *Feuro* (Pahari).

"This fox is very common in Morang, and can be got around the villages. It is easy to take them in their holes at noon. At one place I found ten holes, but only two foxes were in these. Very shy. Traps baited with meat, set near their holes, failed to catch them."—*N. A. B.*

(52) VULPES MONTANA, Pearson.

The Hill Fox.

(Synonymy in No. 15.)

Hodgson records this species as inhabiting the Central and Northern hilly regions of Nepal. This is not improbable, for this fox was obtained by the Mammal Survey in Sikkim at heights above 10,000′ (See Report No. 23) and it has of course long been known from the countries to the west and north of Nepal.

(53) CHARRONIA FLAVIGULA, Boad.

The Northern Indian Marten.

(Synonymy in No. 15 under *Martes flavigula*.)
Nagarkot, 8,000′, ♂ 2, ♀ 1; Godaveru, 7,000′, ♀ 1.
" Hodgson." " Scully " (Ind. Mus:—" Nepal " and "Nimbota," Nepal.)

(*See* also Reports Nos. 15, 20, 23, 25, 27, 28).

Pocock (A. M. N. H. (9) i., p. 308, 1918) has recently established a special genus for this species of Marten, for which Gray's generic name *Charronia* is available.

According to Hodgson it inhabits only the Central Region of Nepal.

(54) MUSTELA SUBHEMACHALANA, Hodgs.

The Himalayan Weasel.

(Synonymy in No. 23.)
" Hodgson,"

Inhabits the Central and Northern regions of Nepal. (*Hodgson.*)

(55) MUSTELA CANIGULA, Hodgs.

The White-nosed Weasel.

1842. *Mustela canigula*, Hodgson, J. A. S. B., xi., p. 279; Blanford Mamm. No. 83.
1843. *Mustela hodgsoni*, Gray, A.M.N.H., xi., p. 118.
" Hodgson."

Although described from Lhasa, Tibet, there is reason to believe that Hodgson subsequently became acquainted with Nepalese specimens of this animal. In some copies (1) of his " Classified Catalogue of the Mammals of Nepal " (J.A.S.B., x., p. 907) with M.S. corrections by Hodgson himself down to the end of 1843, Hodgson has inserted the species in his list. The habitat recorded in his unpublished drawings (Vol. 1, p. 61, Zool. Soc.) reads " Northern region of Himalayas and Tibet " and on the back of the drawing he mentions " Skin from the Kachar, February". The species may therefore be given a provisional place in the present list.

(56) MUSTELA KATHIAH, Hodgs.

The Yellow-bellied Weasel.

(Synonymy in No. 15.)
" Hodgson."

(*See* also Report No. 26.)

The species was obtained by Hodgson from the Kachar of Nepal as early as July 1824.

Besides the species above enumerated Hodgson mentions in his Catalogue of 1841, a *Mustela calotis* inhabiting Central Nepal: this we are unable to identify. He also records *Mustela erminea* from Nepal, but as Blanford points out " the only specimen made over by him to the British Museum is a furrier's skin, said to have been brought from Tibet."

(1) Formerly in the possession of Dr. Gray.

(57) MELOGALE NIPALENSIS, Hodgs.

The Brown Ferret Badger.

1836. *Gulo nipalensis*, Hodgson, J.A.S.B., v., p. 237 ; vi., p. 500.
1853. *Helictis nipalensis*, Gray, P.Z.S., 1853, p. 191 ; Blanford Mamm. No. 87.
"Hodgson."

Inhabits the "Lower region of mountains" of Nepal. (*Hodgson.*)

One of the original specimens was obtained from the "Banks of the Rapti."

In Wroughton's Summary, J.B.N.H.S., xxvi., p. 347, the locality "Dilkoosha, Cachar" doubtless refers to the Kachar of Nepal.

Thomas has recently pointed out (A.M.N.H. (9) ix., p. 193, 1922) that the Ferret Badgers hitherto placed in a single genus *Helictis* fall into three natural genera by the characters of the dentition and baculum. The present species belongs to the genus *Melogale*, Geoff., of which *personata* is the genotype; this includes the species with large teeth and bifid baculum, and ranges through the mainland area from Nepal to Cochin China and Java. The remarkable species found in North Borneo formerly called *Helictis everetti* with small teeth and bifid baculum is now referred to a new genus *Nasictis*, Thomas. *Helictis* is restricted by Thomas to *moschata* and its allies; these forms, inhabiting Assam, China from Canton to Shanghai, Hainan and Formosa, have small teeth and trifid baculum.

(58) MELLIVORA INDICA, Kerr.

The Indian Ratel.

(Synonymy in No. 3.)

"Hodgson."

(*See* also Report No. 19.)

Inhabits the lower hilly region of Nepal. (*Hodgson.*)

(59) LUTRA LUTRA NAIR, F. Cuv.

The Common Indian Otter.

1823. *Lutra nair*, F. Cuvier, Dict. Sc. Nat. xxvii., p. 247 ; Pondicherri, Hodgson, 1839.
1837. *Lutra indica*, Gray, Charlesworth's Mag. N.H., i., p. 580, Madras.
1839. *Lutra monticola*, Hodgson, Cat., p. 14.
1865. *Barangia nepalensis*, Gray, P.Z.S., 1865, p. 124.
"Hodgson."

This is the Indian representative of the Common Otter of Europe, and in previous reports has been noted as *L. lutra*. *Lutra nair* was originally described from Pondicherri, while Gray's *indica* was described from Madras. Hodgson recognised that one of the otters of the Tarai of Nepal was identical with that living in the plains of the peninsula ; but he thought that the corresponding form inhabiting the Lower and Central hilly regions of Nepal was distinct and he described it as a distinct species *L. monticola*. Pending the collection of further material in Nepal we must follow Pohle and relegate *monticola* to the synonymy of *nair*.

(60) Lutrogale barang tarayensis, Hodgs.

The Smooth Indian Otter.

1323. *Lutra barang*, F. Cuvier, Dict. Sc. Nat., Paris, xxvii., p. 46.
1839. *Lutra tarayensis*, Hodgson, J.A.S.B., viii., p. 319.
1865. *Lutra macrodus*, Gray, P.Z.S., 1865, p. 128.
1878. *Lutra ellioti*, Anderson, An. Zool. Res., p. 212.
"Hodgson."

In Nepal, according to Hodgson, this otter is restricted to the Tarai.

Pohle separates the smooth otters from true *Lutra* as a special subgenus for which he has revived Gray's name *Lutrogale*. An independent study of the group leads us, however, to give full generic rank to *Lutrogale*, and we are glad to find that this course has already been adopted by Pocock (P.Z.S., 1921, p. 542), for reasons very similar to our own.

L. b. tarayensis is the most widely spread form of the smooth otter, its range extending through Burma and the plains of India to the foot of the Himalayas. Pohle deserves great credit for having independently, and without access to the original material, arrived at true views as to the status and affinities of *L. tarayensis*. That it is a synonym of *macrodus* was also concluded by Thomas and Wroughton (J.B.N.S., xxvi., p. 48). As Pohle points out it cannot be regarded as more than subspecifically distinct from *L. barang*, Cuv., described from Sumatra.

The representative of *L. b. tarayensis* in the lower and central hilly regions of Nepal is according to Hodgson a distinct form, to which he gave the name *L. aurobrunnea*. Thomas was not able to distinguish the type skin (a young specimen in bad condition) from *tarayensis* and therefore relegated the name *aurobrunnea* to Synonymy.

Pohle describes a specimen in the Berlin Museum, with the doubtful locality "Hinter-indien?", which seems to agree with Hodgson's description and to differ rather conspicuously from *tarayensis*; and he therefore provisionally retains *aurobrunnea* as a distinct subspecies. It is to be hoped that efforts will be made to get a good series of otters of all kinds from both the Tarai and the hilly regions of Nepal, for, as is well known, Hodgson believed the hill forms to be quite distinct from those inhabiting the plains, recognizing in all six nominal forms as occurring within the State. In the absence of modern material it is impossible to arrive at any sound judgment as to this; we can only register our opinion that it is not improbable that Hodgson eventually will be found to be right in this as in so many other matters.

(61) Amblonyx cinerea, Illig.

The Clawless Otter.

(Synonymy in No. 11 under *Aonyx cinerea*.)

"Hodgson".

(See also Reports Nos. 15, 16, 20, 31.)

The Oriental clawless otters are beyond all doubt generically distinct from either of the African clawless genera *Aonyx* and *Paraonyx*; and for them *Amblonyx*, Rafinesque (Atlantic Journ. I, 1832, p. 62) is the earliest name. *Amblonyx* was described as a subgenus of *Lutra* for *L. concolor* the clawless otter of the Garo Hills.

In his monograph Pohle separates the Indian form (under Hodgson's name *indigitata*) from the true *cinerea*, described from Java, and inhabiting Sumatra, Borneo and the Malay Peninsula. It is quite possible that this

distinction is justified, but on the material available we are quite unable to recognize the distinguishing characters, claimed by Pohle and we must therefore for the present continue to use *cinerea* as the specific name for the Indian species. The series representing true *cinerea* in the British Museum is a fairly long one; but our Indian material is extremely poor, including not more than five good skulls to represent the whole of India and Assam. Much the same remark could be made about each of the other Indian otters and it is to be hoped that members of the Society will make efforts to get together a good set of otter skulls representing all species in all localities.

(62) AILURUS FULGENS, F. Cuv.

The Red Cat-Bear.

(Synonymy in No. 23.)

"Hodgson". "Scully". (Ind. Mus. skin "Nepal").

Inhabits the Central and Northern region of Nepal and Tibet (*Hodgson*).

(63) URSUS ISABELLINUS, Horsf.

The Indian Brown Bear.

1827. *Ursus isabellinus*, Horsfield, Linn. Trans. xv., p. 322.
1889. *Ursus arctus*, Blanford (*nec arctos*, Linn.) Mammalia No. 97. "Hodgson".

In Nepal restricted to the northern Region or Kachar. (*Hodgson*).

(64) SELENARCTOS THIBETANUS, F. Cuv.

The Himalayan Black Bear.

1824. *Ursus thibetanus*, F. Cuvier, Hist. Nat., Mamm. pl. 213; Jerdon.
1841. *Ursus torquatus*, Wagner, Schreb, Säugethiere Suppl. ii., p. 144; Blanford "Mammalia" No. 197.
1879. *Ursus gedrosianus*, Blanford, J. A. S. B., xlvi., p. 317.
1917. *Arcticonus thibetanus*, Pocock, Ann. Mag. N. H. (8) xxi, p. 129; "*Arcticonnus*" antedated by *Selenarctos*, Heude 1901—(*vide* Sowerby J. Mamm., 1, p. 216). "Hodgson".

(See also Reports Nos. 14, 20.)

Blanford rejected Cuvier's specific name *thibetanus* because this animal occurs on the southern slopes of the Himalayas and not in Thibet; that of course is technically an inadmissible objection to the use of the earlier name. Pocock in the course of his studies of the external characters of the bears has found good reason for separating *thibetanus* as a distinct genus for which he proposed the name *Arcticonus*. But more recently Sowerby has pointed out that *Arcticonus* is antedated by *Selenarctos*.

We would take this opportunity to point out that the material representing the Bears of the Indian Empire in the British Museum is very poor. It is to be hoped that efforts will be made to get a good series of skulls (at all events) together for the national collection. There are many questions relating to the characters and status of local races which in the absence of proper materials for comparison must remain unanswered.

(65) PETAURISTA NOBILIS, Gray.

The Himalayan Flying Squirrel.

(Synonymy in No. 23.)

"Hodgson".

Central Region of Nepal.

(66) PETAURISTA CANICEPS, Gray.

The Grey-headed Flying Squirrel.

1842. *Pteromys caniceps*, Gray, A. M. N. H. x., p. 262; Blanford Mamm. No. 231.
1844. *Pteromys senex*, Hodgson, J. A. S. B., xiii., p. 68.
1911. *Petaurista caniceps*, Wroughton, J. B. N. H. S., xx, p. 1019.

"Hodgson".

Central Region of Nepal. (*Hodgson*).

(67) PETAURISTA ALBIVENTER, Gray.

Hodgson's Flying Squirrel.

(Synonymy in No. 15.)

"Hodgson".

Ind. Mus. Collector 1871 (Cal. I. M. ii., p. 36. Katmandu).

Hodgson discovered four species of Flying Squirrel in Nepal, *viz.*, the three species of *Petaurista* named above and *Pteromys alboniger* mentioned below. He describes them collectively as inhabiting the Lower, Central and Northern hilly regions of Nepal but as being rare in the Lower hilly region.

As explained by Wroughton (J. B. N. H. S., xx., p. 1019) Gray's names for the three species of *Petaurista* have to be used as being earlier than those proposed by Hodgson, delay having unfortunately occurred in publishing the original descriptions drawn up by the latter naturalist.

(68) PTEROMYS (HYLOPETES) ALBONIGER, Hodgs.

The Particoloured Flying Squirrel.

(Synonymy in No. 23.)

Sipari, ♂ 1.

"Hodgson".

Inhabits the Central and Northern regions of Nepal. (*Hodgson.*)

"Vernacular names:—*Rajpanki* (pahari); *Pyampio* (Bhotia). These flying squirrels live in holes in trees. At certain seasons they come down to lower elevations and are said to be plentiful. They build nests of grass in holes; and move about at sunset". N.A.B.

(69) RATUFA GIGANTEA GIGANTEA, McCl.

The Assam Giant Squirrel.

(Synonymy in No. 14.)

"Hodgson" ("*Sciurus macruroides.*").

(See also Reports Nos. 23, 26, 28.)

Inhabits the Lower region and deep valleys of Central Nepal. (Hodgson M.S.).

But in his printed Catalogue of 1841 Hodgson, speaking of this species together with "*Sciurus locria*" and *locroides*, says of them all "Habitat Lower Central and Northern Regions indifferently".

(70) DREMOMYS LOKRIAH, Hodgs.

The Orange-bellied Himalayan Squirrel.

(Synonymy in No. 20.)

Hathiban, ♂ 1; Chalna-Khel, ♂ 1.

"Hodgson" "Scully".

(See also Reports Nos. 23, 26.)

Inhabits Central and Lower hilly regions of Nepal. (Hodgson M.S.)

"Vernacular name for this and *Tomeutes*:—*Lotorki* (Mallaha and Pahari). Squirrels are common throughout the forest. Live in holes in trees. When alarmed utter a loud cry, and lie flat along the branch of a tree".—*N.A.B.*

Four specimens were obtained by Scully, three from Sheopari Ridge in the Nepal Valley, and one from Sisagutu. (Cat. Calc. Mus. II., 20.)

(71) TOMEUTES LOKROIDES, Hodgs.

The Hoary-bellied Himalayan Squirrel.

(Synonymy in Nos. 20 and 23.)

Nowakot, ♂ 1; Loharipavda, 8,000′, ♂ 3, ♀ 2; Sunachir, ♂ 1; Katmandu, 8,000′, ♀ 2; Hetwada, ♂ 1, ♀ 1; Hathiban, ♀ 1; Chalna-Khel, ♂ 1; Hazaria, 300′, ♂ 6, ♀ 1; Bankalwa, ♂ 2.

"Hodgson". "Scully" (Nowakot Dist.)

(*See* also Reports Nos. 23, 26-28.)

Generally distributed in Nepal (Hodgson; *see* under *Ratufa*).

(72) FUNAMBULUS PENNANTI, Wrought.

The Common Five-striped Squirrel.

(Synonymy in No. 1.)

Tribinia, ♂ 1, ♀ 1.

Not recorded by Hodgson; probably confined to the Tarai.

(73) MARMOTA HIMALAYANUS, Hodgs.

The Tibet Marmot.

(Synonymy in No. 23.)

"Hodgson".

Habitat Northern Region of Nepal and Tibet. (*Hodgson.*)

(74) TATERA INDICA, Hardw.

The Indian Gerbil.

(Synonymy in No. 1.)

Bairia, 300′, ♂ 1, ♀ 2; Hazaria, 300′, ♂ 1, ♀ 1.

Probably restricted to the Tarai in Nepal.

"Vernacular name:—*Hurma* (Mallaha). Very common at Patherghatta. The flesh is eaten by the Mallahas".—*N.A.B.*

(75) BANDICOTA NEMORIVAGA, Hodgs.

The Smaller Bandicoot.

1836. *Mus* (*Rattus*) *nemorivagus*, Hodgson, J.A.S.B., xv., p. 234; Ann. Mag. N.H., xv., p. 266, 1845.

1845. *Mus macropus*, Hodgson, A.M.N.H., xv., p. 266.

1891. *Nesocia nemorivaga* (in part), Blanford, Mammalia No. 297.

1908. *Bandicota nemorivaga*, Wroughton, J. B. N. H. S., xviii., p. 752. "Hodgson".

Inhabits the Central and Northern Regions of Nepal so far as known. (*Hodgson.*)

(76) GUNOMYS BENGALENSIS, Gray and Hardw.

The Bengal Mole Rat.

(Synonymy in No. 19.)

Bairia, 300′, ♂ 1, ♀ 2; Hazaria, 300′, ♂ 1; Bankalwa Morang, ♂ 1, ♀ 1.

This species is probably restricted to the Tarai in Nepal.

(77) RATTUS RATTUS BRUNNEUSCULUS, Hodgson.

White-bellied House Rat of Nepal.

1845. *Mus brunneusculus*, Hodgson, A. M. N. H., xv., p. 267.

1922. *Rattus rattus brunneusculus*, Hinton, J. B. N. H. S., xxvii., p.1057; Kakani, 7,000′, ♂ 1; Ramchie, 11,000′, ♀ 1, Sunachir, ♀ 1; Pattbhagan. 8,000′, ♀ 1; Nagarkot, 8,000′, ♂ 4, ♀ 8. "Hodgson".

The specimens collected by the Survey show that Hodgson's "*Mus brunneusculus*" is a well marked subspecies of *Rattus rattus* confined to the elevated Central Valley of Nepal and the slopes of the surrounding mountains, and most closely related to *R. r. sikkimensis*.

(78) RATTUS RATTUS BRUNNEUS, Hodgson.

The Nepalese House Rat.

1845. *Mus brunneus*, Hodgson, A. M. N. H., xv., p. 266.

1922. *Rattus rattus brunneus*, Hinton, J. B. N. H. S., xxviii., p. 1058. Typical specimens:—Ferping, ♀ 5; Hatiban, ♀ 7: Godaveru, ♀ 2; Chalna-Khel, ♀ 1; Katmandu, 8,000′, ♂ 1. White-bellied variety:—Changoo, ♂ 2, ♀ 5. "Hodgson".

This remarkable rat (confined to the Central Valley and hilly region of Nepal) was believed by Hodgson and all subsequent writers to be nearly related to, or identical with, the Common Rat of Europe (*R. norvegicus*= "*decumanus*"), a species not otherwise known to occur in India, except as an introduced animal in the neighbourhood of the great ports. The material now collected by the Mammal Survey in Nepal enables us to prove that *brunneus* is a peculiar development from *R. rattus* and that its resemblance to *R. norvegicus* is purely superficial. The specimen (now B. M. No.) mentioned by Horsfield (Cat. Mamm. Mus. E. India Co., London 1851, p. 161) in connection with "*Mus arboreus* Buchanan-Hamilton" proves on examination to be one of Hodgson's specimens of *brunneus* sent by Hodgson as a gift to Sir W. Eliot, who considered it to be identical with his *Mus flavescens*.

(79) RATTUS RATTUS ARBOREUS, Buch-Hamilton.

The Bengal Tree Rat.

1851. *Mus arboreus*, Buchanan-Hamilton Horsfield, Cat. Mamm. Mus. E. India Co., London, p. 161.

1918. *Rattus rattus arboreus*, Hinton, J. B. N. H. S., xxvi., p. 74.

These specimens, agreeing closely with the material from Bengal and Orissa, show that the range of the present subspecies extends into the Nepal Tarai.

(80) RATTUS RATTUS RUFESCENS, Gray.

The Common Indian Rat.

(Synonymy in No. 1.)

Bairia, ♂ 1; Hazaria, 3,000′, ♂ 4, ♀ 4.

These specimens from the Nepal Tarai are perfectly typical examples of "*Mus rufescens*, Gray" in the strictest sense. It is of interest to note that none of the various House Rats found in Nepal, whether in the Tarai or in the Central Valley and Hills, shows the slightest trace of being affected by the introduction of rats from extraneous sources.

(81) RATTUS RATTOIDES, Hodgson.

The Nepal Hill Rat.

1845. *Mus rattoides*, Hodgson, Ann. Mag. N. H., xv., p. 267.
1914. *Epimys vicerex*, Wroughton (*nec.* Bonhote) Report No. 23. (Sikkim) J. B. N. H. S., xxiv., p. 489.

Katmandu, 8,000′, 1 unsexed; Nagarcot, ♂ 7, ♀ 7; Ferping, ♀ 3; Hathiban ♂ 2, ♀ 1; Thankot, ♂ 3; Changoo, ♂ 2; Sipari, ♂ 1; Ramchie, 11,000′, ♀ 1.

This is the rat which Hodgson thought represented the Black Rat of Europe (*R. rattus*) in Nepal. The material now collected by the Mammal Survey proves that this species is closely related to *R. vicerex* described from Simla, differing from it by its more modified skull, harsher coat, darkened colour and, usually, by its uniformly dusky tail. To *rattoides* must be referred also the specimens collected by the Survey in Sikkim, which were referred by Wroughton in Report No. 23 to *vicerex* "with some hesitation".

(82) RATTUS NITIDUS, Hodgson.

The Nepal Shiny Rat.

(Synonymy in No. 15.)

Ferping, ♀ 1; Thankot, ♂ 1; Changoo, ♂ 1, ♀ 1.

This rat, of which long series were obtained by the Mammal Survey in Kumaon and Sikkim, appears to be rare in Nepal.

(83) RATTUS FULVESCENS, Gray.

The Bicoloured Rat.

(Synonymy in No. 14.)

Hathiban, ♂ 3, ♀ 2; Chalna-Khel, ♂ 1, ♀ 2; Changoo, ♀ 1; Bouzini, ♂ 3.
"Hodgson".

"Trapped in a big rock, where there are old porcupine holes".—*N.A.B.*

(84) RATTUS NIVEIVENTER, Hodgson.

The White-bellied Rat.

(Synonymy in No. 15.)

Thankot ♂ 1, ♀ 1, unsexed 1; Chalna-Khel, ♂ 2
"Hodgson".

"Inhabits the Central and Northern Region of Nepal" (*Hodgson*).

(85) Millardia meltada, Gray.

The soft-furred Field Rat.

(Synonymy in No. 1.)

Bairia, 300′, ♂ 1.

Probably restricted to the Tarai in Nepal.

(86) Vandeleuria dumeticola, Hodgson.

Hodgson's Tree Mouse.

(Synonymy in No. 16.)

"Hodgson". Indian Mus. Collector, 1870, Katmandu.
"Scully" (Indian Mus., Katmandu).

(*See* also Reports Nos. 23, 25, 26, 27, 28.)

Central and Northern Nepal. (*Hodgson.*)

(87) Mus dubius, Hodgson.

The Nepal House Mouse.

(Synonymy in No. 15.)

"Hodgson".

(*See* also Reports Nos. 5, 6, 8—16, 18—20, 22, 23, 26, 27, 28, 30, 31, and 34, under *manei* and *urbanus*.

(88) Leggada cervicolor, Hodgson.

The Nepal Field Mouse.

1845. *Mus cervicolor*, Hodgson, A. M. N. H., xv., p. 268.
1845. *Mus strophiatus*, Hodgson loc. cit.

Bouzini, ♀2; Sipari, ♂ 1, ♀ 1.

"Hodgson".

The four specimens collected by Baptista agree perfectly in outward appearance with the lectotype and lectoparatype of Hodgson's "*Mus cervicolor*" as well as with the type of his "*Mus strophiatus*". Unfortunately not one of the skulls is entire and beyond sufficing to prove that this animal is a *Leggada* and not a *Mus* they do not help us to form any idea as to the status of this nominal species. (*cf. Thomas* J. B. N. H.S., xxvi, p. 418, footnote.)

(89) Golunda ellioti, Gray.

The Indian Bush Rat.

(Synonymy in No. 1.)

"Hodgson".

Hodgson's *Mus myothrix* (A. M. N. H., xv., p. 267) is usually placed in the synonymy of *Golunda ellioti*; but as Wroughton pointed out in the first Report the type is a mutilated flat skin and when the species is rediscovered it will probably turn out to be distinct from *ellioti*.

Inhabits Central and Northern Regions of Nepal (*Hodgson*).

"Tenants the woods solely, dwells in burrows under roots of trees, but not gregariously". *Hodgson.*

(90) CANNOMYS BADIUS, Hodgson.

The Bay Bamboo Rat.

(Synonymy in No. 20.)

Sunachir, ♂ 1; Hazaria, 300′, ♀ 2.
"Hodgson".

(*See* also Reports Nos. 23, 25—27.)

Inhabits the Lower and Central hilly regions of Nepal. *Hodgson.*

"Vernacular names:—*Khuma* (Mallaha); *Hondrongi Moosa* (Pahari).

"This rat lives under the roots of a tree. The burrow is large and can be recognized by the large quantity of earth thrown out in front of it. In winter the burrow is not so deep as in summer. The flesh is eaten by the Mallahas".—*N. A. B.*

(91) ACANTHION LEUCURUS, Sykes.

The Indian Porcupine.

(Synonymy in No. 1.)

"Hodgson".

While resident in Nepal Hodgson thought that all the porcupines of that country were referable to the present species which he called "*nipalensis*". That he had examples of *leucurus* before him in Nepal is proved by one of his drawings (Zool. Soc. M. S., Vol. i., p. 213) representing a full grown female, weighing 30 lbs., which was sent home by Hodgson in July 1837.

(92) ACANTHION HODGSONI, Gray.

The Crestless Himalayan Porcupine.

(Synonymy in No. 27.)

Hathiban, ♂ 1.
"Hodgson". "Scully" (Ind. Mus.)

Hodgson first learnt to discriminate between this and the last-mentioned species during his residence in Darjiling, and the specimens upon which he based his "*Hystrix alophus*" were all obtained in Sikkim. In the description of *alophus* the habitat is given simply as the "Sub-Himalayan slopes". A few months before the publication of Hodgson's paper, Gray described his *Acanthion hodgsoni* basing it upon two specimens obtained by Hodgson in Nepal. Hodgson's name "*nipalensis*" is therefore, in part, a synonym of this species as well as of *leucorus*.

"This porcupine is not common at present (April), and it is very difficult to find its holes. I am told that in the middle of July it is frequently seen among cornbeans. I trapped it about two miles from camp, where there was a pair in a hole, but one escaped leaving its hind leg in a trap".—*N. A. B.*

(93) LEPUS RUFICAUDATUS, Geoff.

The Common Indian Hare.

(Synonymy in No. 15.)

Kakani, ♀ 1; Thankot, ♂ 1; Bouzini, ♂ 3, ♀ 4; Nagarkot, ♂ 1; Bairia, 300′, ♂ 1, ♀ 2; Bankalwa, ♂ 2.
"Hodgson". "Scully" (Ind. Mus. Thankot.)

(*See* also Reports Nos. 19, 21, 23, 26, 27.)

Generally distributed in Nepal. Hodgson (1841).

"Common near the bank of the Soonsori River. The villagers catch them in nets. Very common in Nepal".—*N. A. B.*

(94) Lepus oiostolus, Hodgson.

The Woolly Hare.

1840. *Lepus oiostolus,* Hodgson, J. A. S. B., ix., p. 1186.
1842. *Lepus pallipes,* Hodgson, J. A. S. B., xi., p. 288. Blanford Mamm. No. 324.
"Hodgson".

Habitat—Northern region of Nepal and Tibet. (Hodgson, 1841.)

(95) Ochotona roylei nipalensis, Hodgson.

The Himalayan Mouse Hare.

(Synonymy in No. 15.)

Pattibhagan, 8,000′, ♂ 4, ♀ 2, unsexed 1.

"Hodgson".

Habitat—Northern Region of Nepal and Tibet. (Hodgson, 1841.)

As stated in describing the mammals from the Mount Everest expedition of 1921 (Thomas and Hinton, A. M. N. H. (9) ix., p. 184) *Ochotona roylei* is represented by three well marked subspecies in the Himalayan region, namely by the typical form living in Kumaon, by the somewhat greyer though not materially different "*O. r. wardi*" of Kashmir and Hazara on the west, and lastly by the present dark-coloured subspecies inhabiting Nepal on the east.

(96) Bibos gaurus, H. Smith.

The Gaur.

(Synonymy in No. 5.)

"Hodgson".

(*See* also Reports Nos. 6, 11.)

Restricted in the Nepal to the Tarai. (Hodgson, 1841.)

(97) Poëphagus grunniens, Linn.

The Yak.

1766. *Bos grunniens,* Linnæus, Syst. Nat. I., p. 99; Blanford, Mamm. No. 341.
1827. *Bospoëphagus,* H. Smith, Griffith's An. Kingd., iv., p. 404.
1843. *Poëphagus grunniens,* Gray, List Mamm. B. M., p. 153.

According to Hodgson this species inhabits the Northern region of Nepal as well as Tibet. It is also known to occur in the highlands of Sikkim and Ladak.

(98) Bubalis bubalis macroceros, Hodgson.

The Buffalo.

(For synonymy, *see* Lydekker Cat. Ungulates 1, p. 41.)
"Hodgson".

The type locality of this subspecies is apparently Nepal, not Assam as stated by Lydekker.

In Nepal the Buffalo is restricted to the Tarai. (Hodgson, 1841.)

(99) Ovis ammon hodgsoni, Blyth.

The Argali.

(Synonymy in Lydekker Cat., Ungulates 1, p. 97.)
" Hodgson".

Inhabits the northern region of Nepal. (Hodgson, 1841.)

(100) Pseudois nahoor, Hodgson.

The Bharal.

1833. *Ovis nayaur*, Hodgson, As. Res. xviii., p. 135, name misprinted.
1834. *Ovis nahoor*, Hodgson, P. Z. S., 1834, p. 107, misprint corrected.
1840. *Ovis burrhel*, Blyth, P. Z. S. 1840, p. 67.
1846. *Pseudois nahoor*, Hodgson, J. A. S. B., xv., p. 343.
1843. *Ovis nahura*, Gray, List Mamm. B. M., p. 170; Blanford Mamm. No. 346.
" Hodgson".

Habitat—Northern Region of Nepal. (Hodgson, 1841.)

(101) Capra sibirica skyn, Wagner.

The Himalayan Ibex.

(Synonymy in Lydekker Cat. Ung. 1, p. 149.)

Found in the Northern Region of Nepal. (Hodgson, 1841.)

(102) Hemitragus jemlahicus, H. Smith.

The Tahr.

1827. *Capra jemlahica*, H. Smith, Griffith's An. King, iv., p. 308.
1833. *Capra jharal*, Hodgson, As. Res. xviii., p. 129.
1835. *Capra quadrimammis*, Hodgson, J. A. S. B., iv., p. 710.
1847. *Hemitragus jemlaicus*, Gray, Cat. Osteol. B. M., p. 60; Blanford " Mammalia" No. 350.
Godaveru, 7,000′, ♀ 1.
" Hodgson".

Inhabits the Northern Region of Nepal. (Hodgson, 1841.)

(103) Capricornis sumatraensis thar, Hodgson.

The Nepalese Serow.

(Synonymy in Lydekker Cat. Ung. 1, p. 193.)
"Hodgson",

Inhabits Central and Northern Regions of Nepal. (Hodgson.)

(104) Nemorhædus hodgsoni, Pocock.

The Brown Himalayan Goral.

1908. *Nemorhedus hodgsoni*, Pocock, P. Z. S., 1908, p. 195.
1913. *Nemorhædus hodgsoni*, Lydekker, Cat., Hume Bequest. B.M., p. 26.
Ramchie, 11,000′, ♂ 1, ♀ 1.

Hodgson refers to this animal under the name *Nemorhædus goral* and states that it inhabits Central and Northern Nepal.

(105) Tetraceros quadricornis, Blainv.

The Four-horned Antelope.

(Synonymy in No. 2.)
"Hodgson".
(*See* also Reports Nos. 5, 7.)

Restricted to the Tarai in Nepal. (*Hodgson.*)

(106) Antilope cervicapra, Linn.

The Blackbuck.

(Synonymy in No. 1.)

(*See* also Reports Nos. 5, 10, 11, 24.)

Restricted to the Tarai in Nepal. (*Hodgson.*)

(107) Gazella bennetti, Sykes.

The Indian Gazelle.

(Synonymy in No. 1.)

(*See* also Reports Nos. 3, 7, 10, 17, 24.)

Restricted to the Tarai in Nepal. (*Hodgson.*)

(108) Muntiacus vaginalis, Bodd.

The Bengal Rib-faced Deer.

(Synonymy in No. 2, under *aureus.*)

Ramchie, 11,000′, ♂ 3; Thunsi, ♀ 1; Thankot, ♂ 1; Nagarkot, 8,000′, ♂ 1, ♀ 2, juv. 1; Hathiban, ♂ 1, ♀ 1. "Nepal", ♂ 1.
" Hodgson".

(*See* also Reports Nos. 20, 23, 27.)

Found in the Tarai, Lower and Central Hilly Regions of Nepal (*Hodgson.*)

"Vernacular name :—*Mirga* (Pahari.)

Very common in Hathiban and Thankot."—*N. A. B.*

(109) Axis axis, Erxl.

The Spotted Deer.

(Synonymy in No. 5.)

Hazaria, 300′, ♀ 1; Bairia, 300′, ♀ 1.
" Hodgson".

(*See* also Reports Nos. 6, 7, 11.)

Hodgson thought there were two forms of this deer in Nepal, a larger and a smaller; both confined to the Tarai.

"Very common in above localities".—*N.A.B.*

(110) Hyelaphus porcinus, Zimm.

The Hog Deer.

1777. *Cervus porcinus*, Zimmermann, Spec. Zool. Geogr., p. 552; Blanford Mammalia No. 369.
1827. *Cervus pumilio*, Hamilton-Smith, Griffith's An. King. iv., p. 120.
1844. *Hyelaphus porcinus*, Sundevall. Kong. Vet. Ak. Handl. 1844, p. 181.
1852. *Axis oryzus*, Kelaart, Prod. Faun. Zeylan, p. 83.

Bankalwa, ♂ 1, ♀ 2; Hindalwa, ♂ 2.
"Hodgson".

Restricted to the Tarai in Nepal. (*Hodgson.*)

"Vernacular-name :—Logna (Pahari).

Very common at Bankalwa. Villagers catch them with a net".—*N.A.B.*

(111) Rusa unicolor, Kerr.

The Sambar.

(Synonymy in No. 5.)

"Hodgson".

(*See* also Reports Nos. 11, 15, 17, 18, 22, 27.)

In Nepal most frequent in the Tarai but occurring rarely in the Lower Hilly Region. (*Hodgson.*)

Hodgson thought that this animal was represented by three distinct species in Nepal, *viz.*, his "*jaraya, nepalensis* and *heterocerus*".

(112) Rucervus duvaucelli, Cuv.

The Barasingha.

1825. *Cervus duvaucelli*, Cuvier, Ossemens Foss., ed. 3, iv., p. 505.
" Hodgson".

Restricted to the Tarai in Nepal. (*Hodgson.*)

(113) Cervus wallichi, Cuv.

The Shou.

1825. *Cervus wallichi*, Cuvier, Oss. Foss. ed. 3, iv., p. 504.
" Hodgson".

Inhabits Northern hilly region of Nepal. (Hodgson.)

(114) Moschus moschiferus, Linn.

The Musk Deer.

(Synonymy in No. 3.)

" Hodgson".

Inhabits the Northern hilly region of Nepal and Tibet. (*Hodgson*)

Hodgson thought there were three species of this genus in Nepal.

(115) Moschiola meminna, Erxl.

The Indian Chevrotain or Mouse Deer.

" Hodgson".

(*See* also Reports Nos. 11, 13, 18.)

Found only in the Tarai. (Hodgson.)

(116) Sus cristatus, Wagn.

The Indian Wild Boar.

(Synonymy in No. 5.)

Bankalwa, ♀ 1.
" Hodgson".

(*See* also Reports Nos. 8, 10, 11, 18, 20, 22, 27, 30.)

Hodgson thought there were two varieties of wild Boar in Nepal ; and he states that they are generally distributed in that country.

" Very common all over Morang and Patherghatta".—*N. A. B.*

(117) Rhinoceros unicornis, Linn.

The Great Indian Rhinoceros.

1758. *Rhinoceros unicornis*, Linnæus, Syst. Nat. ed. 10, Vol. i., p. 56; Blanford " Mammalia" No. 334.

1801. *Rhinoceros indicus*, Cuvier, Menag. Mus. Hist. Nat., 1801, p.

1880. *Rhinoceros asiaticus*, Blumenbach, Handb. Naturgesch., eds. 12, p. 107.
1867. *Rhinoceros stenocephalus*, Gray, P. Z. S., 1867, p. 1018.
"Hodgson".
(Ind. Mus. Sir E. Baring, 1875, and J. Anderson, 1880, "Nepal Tarai".)

Restricted to the Tarai in Nepal. (*Hodgson.*)

(118) ELEPHAS MAXIMUS, Linn.

The Indian Elephant.

1766. *Elephas maximus*, Linnæus, Syst. Nat., ed. 10, i., p. 48.
1803. *Elephas asiaticus*, Blumenbach, Handb. Naturgesch, ii., p. 403.
"Hodgson".

In Hodgson's opinion two varieties of Elephant occur in Nepal, his "*isodactylus*" and "*heterodactylus*".

Restricted to the Tarai.

(119) MANIS PENTADACTYLA, Linn.

The Eastern Pangolin.

1758. *Manis pentadactyla*, Linnæus. Syst. Nat., ed. 10, i., p. 36 ; Wroughton, J. B. N. H. S., xxvii., p. 913, 1920.
1836. *Manis aurita*, Hodgson, J. A. S. B., v., p. 234 ; Blanford Mamm. No. 400.
"Hodgson".

Generally distributed in Nepal. (*Hodgson.*)

In addition to those mentioned above many species have been added to the Nepal List by Blanford, Wroughton, or others, merely upon the basis of specimens in the Hodgson Collection inaccurately labelled "Nepal". A list of these species is given below. Some of them may occur in Nepal, but at present there is no definite evidence of such occurrence.

Species asserted to be from Nepal but in reality from other countries ;—

Name.	Type locality.
Barbastella darjelingensis, Hodgs.	.. Darjiling.
Plecotus homochrous, Hodgs.	.. Sikkim (probably).
Tupaia belangeri chinensis, And. ..	.. Sikkim (probably).
Soriculus caudatus, Horsf.	.. Darjiling.
Soriculus leucops, Horsf.	.. Darjiling.
Felis marmorata, Martin	.. Sikkim (probably).
Paradoxurus strictus, Horsf.	.. Sikkim (Wroughton, J. B. N. H. S., xxv., p. 51).
Vulpes ferrilatus, Hodgs.	.. Lhasa, Tibet.
Mustela strigidorsa, Gray	.. Sikkim.
Mustela temon, Hodgs.	.. Nepal. (But his type is probably from Sikkim.)
Arctonyx collaris, F. Cuvier	.. Sikkim.
Tamiops macclellandi, Horsf.	.. Sikkim (probably).
Caprolagus hispidus, Blyth	.. Sal Forest of Sikkim, 1847.
Ochotona curzoniæ, Hodgs.	.. Sikkim.
Equus kiang, Moorcroft . ..	.. Tibet.

In conclusion we should wish to draw attention to the fact that a Collection of Mammals from the Ganduk Basins, *i.e.*, the region lying between Kumaon and Katmandu, would be of very great value.